

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: George JOYNES

Serial No.: NOT YET ASSIGNED

Filed: AUGUST 31, 2001

Title: IMPROVEMENTS IN OR RELATING TO FLUID FLOW SENSORS
AND LEAK DETECTION SYSTEMS

PRELIMINARY AMENDMENT

Box PATENT APPLICATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please enter the following amendments to the claims prior
to the examination of the application.

IN THE CLAIMS:

Please cancel claims 11 and 14.

Please amend claim 13 as follows:

(A copy of the marked-up version of the amended claim is
are attached to this Preliminary Amendment).

13. (Amended) A leakage detection system as claimed in
claim 12, further comprising apparatus for determining the
presence of a leakage from a fluid system comprising a
vibration sensor for sensing vibrations induced by passage of

the fluid through the leakages, a segmentor for segmenting the sensed vibrations into at least two spectral bands, a comparitor for comparing the amplitudes of the spectral bands with predetermined values to determine flow rate.

Please add new claims 15-17 as follows:

15. (New) Apparatus as claimed in claim 13 wherein the sensor includes a piezo-electric material.

16. (New) Apparatus as claimed in claim 15 wherein the sensor includes a PVDF film.

17. (New) Apparatus as claimed in claim 15 wherein the sensor comprises one of a train gauge, geophone or hydrophone.

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REMARKS

Entry of the amendments to claims before examination of the application is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #3036/50371).

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please cancel claims 11 and 14.

Please amend claim 13 as follows:

13. (Amended) A leakage detection system as claimed in claim 12 [including apparatus as claimed in claims 7 to 11],
further comprising apparatus for determining the presence of a leakage from a fluid system comprising a vibration sensor for sensing vibrations induced by passage of the fluid through the leakages, a segmentor for segmenting the sensed vibrations into at least two spectral bands, a comparitor for comparing the amplitudes of the spectral bands with predetermined values to determine flow rate.

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